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The designated uses and degree of support for Segment 080903 of the Ouachita River Basin are as indicated in the table below^{1/}:

Overall Degree of Support for Segment 080903	Degree of Support of Each Use						
	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Partial	Not Supported	Full	Not Supported	N/A	N/A	N/A	N/A

^{1/}The designated uses and degree of support for Segment 080903 of the Ouachita River Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2004 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 080903 of the Ouachita River Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated September 29, 2006 from Watson (FWS) to Brown (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit modification and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

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For additional information, contact:

Ms. Ronda Burtch
Permits Division
Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

IX. PROPOSED PERMIT LIMITS:

Subsegment 080903, Big Creek - Headwaters to Boeuf River (including Big Colewa Bayou), is listed on LDEQ's Final 2004 303(d) List as impaired for pathogen indicators. Although TMDLs for the Ouachita River Basin were due to be completed by 2001, a TMDL has not yet been developed for fecal coliform for this waterbody. A TMDL will be scheduled following completion of the EPA Consent Decree TMDL schedule. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by a future TMDL.

Subsegment 080903 was previously listed as impaired for nitrogen (NITRATE + NITRITE AS N), organic enrichment/low DO, suspended solids/turbidity/siltation, and Atrazine/Carbofuran/DDT/Methyl Parathion, for which the below TMDLs have been developed. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving waterbodies based upon additional TMDLs and/or water quality studies. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDLs for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards.

To protect the receiving waterbody against high levels of pathogenic organisms, fecal coliform limitations will remain as previously permitted.

The following TMDLs have been established for subsegment 080903:

Big Creek Watershed TMDL for Biochemical Oxygen-Demanding Substances or Pollutants and Nutrients

Most of the dischargers in this watershed are small and located on tributaries to the 303(d) listed waterbody. It is unlikely that they will have an impact on the targeted waterbody due to the small load and/or the distance from the waterbody named on the 303(d) list. However, this facility is part of the Original Ouachita River Basin Plan and limits for CBOD₅ and ammonia-nitrogen will remain as previously permitted.

Total Maximum Daily Load (TMDL) for Selected Pesticides in the Ouachita River Basin

There are no known point sources for a Carbofuran, DDT, Methyl Parathion or Toxaphene in Big Creek, Boeuf River, Joe's Bayou, Macon Bayou or the Tensas River watersheds. Therefore, no limitations for pesticides will be required of this facility.

Total Maximum Daily Load (TMDL) for TSS, Turbidity, and Siltation for 13 Subsegments in the Ouachita River Basin

As per the TMDL, "Point sources do not represent a significant source of TSS as defined in this TMDL. Because an enforceable mechanism is in place to protect from discharges of organic suspended solids no TMDL is required for these materials." Therefore, TSS limitations will remain as previously permitted.

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Final Effluent Limits:

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Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
CBOD ₅	25	10 mg/l	15 mg/l	Limits are set in accordance with the Ouachita River Basin Plan for facilities of this treatment type and size.
TSS	38	15 mg/l	23 mg/l	Limits are set in accordance with the Ouachita River Basin Plan for facilities of this treatment type and size.
Ammonia-Nitrogen	13	5 mg/l	10 mg/l	Limits are set in accordance with the Ouachita River Basin Plan for facilities of this treatment type and size.

Other Effluent Limitations:

1) Fecal Coliform

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

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X. PREVIOUS PERMITS:

LPDES Permit No. LA0043648: Issued: September 1, 2002
 Expired: August 31, 2007

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Daily Avg.</u>	<u>Daily Max.</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Report	Report	Continuous	Recorder
CBOD ₅	10 mg/l	15 mg/l	2/month	Grab
TSS	15 mg/l	23 mg/l	2/month	Grab
Ammonia-Nitrogen	5 mg/l	10 mg/l	2/month	Grab
Fecal Coliform Colonies	200	400	2/month	Grab

XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:

A) Inspections

A review of the files indicates the following inspections were performed during the period beginning February 27, 2005 and ending February 27, 2007 for this facility.

Date: May 23, 2006

Inspector: LDEQ

Findings and/or Violations:

1. The Design Capacity of 0.3 MGD was exceeded for the months and years of 04/03 (MM/YY), 05/03, 06/03, 07/03, 08/03, 09/03, 11/03, 12/03, 01/04, 02/04, 03/04, 04/04, 05/04, 06/04, 07/04, 08/04, 09/04, 10/04, 11/04, 12/04, 01/05, 02/05, 03/05, 04/05, 05/05, 06/06, 11/05, 01/06, 02/06, and 03/06.
2. The sample measurement data on the DMRs are reported incorrectly; whereas,
 - a. The flow average exceeds the maximum for the months and year of 08/03 and 09/03.
 - b. The fecal coliform average exceeds the maximum for the months and years of 11/03, 12/03, and 02/04.
 - c. The ammonia-nitrogen average exceeds the maximum for the months and year of 06/05 and 07/05.
3. The sample measurement data on the DMRs are inconsistent with the sample analysis results; here fore,
 - a. TSS for the months and years of 08/03, 09/03, 01/05, 03/05, 05/05, 09/05, 10/05, and 2/06.
 - b. Fecal coliform for the months and years of 01/04, 03/04, 04/04, 05/04, 07/04, 08/04, 09/04, 12/04, 01/05, 02/05, 03/05, 05/05, 08/05, 09/05, 10/05, 11/05, 01/06, 02/06, and 03/06.
 - c. CBOD₅ for the months and year of 01/05, 03/05, and 10/05.
 - d. Ammonia-nitrogen for the months and years of 03/05, 09/05, 11/05, 12/05, and 03/06.
 - e. The concentration averages were not being flow weighted.
4. The ammonia-nitrogen permit limitation(s) was exceeded for the months and years of 04/03, 05/03, and 03/06.
5. The TSS permit limitation(s) was exceeded for the months and years of 01/05, 02/05, 03/05, 04/05, 05/05, 10/05, 12/05, and 03/06.
6. The frequency of analysis / sampling for CBOD₅ was not performed as required for the months and years of 06/04, 07/04, 10/05, and 12/05.
7. There were no non-compliance reports presented or revealed with the exception of the month and year of 03/06.

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B) Compliance and/or Administrative Orders

A review of the files indicates that there are no recent enforcement actions administered against this facility.

C) DMR Review

A review of the discharge monitoring reports for the period beginning January 1, 2005 through December 31, 2006 has revealed the following violations:

Month	Parameter	DMR Reported Value	Permit Limit
January 2005	TSS, Monthly Loading	106.82 lbs/day	38 lbs/day
February 2005	TSS, Monthly Loading	114.24 lbs/day	38 lbs/day
March 2005	TSS, Monthly Loading	74.52 lbs/day	38 lbs/day
April 2005	TSS, Monthly Loading	88.61 lbs/day	38 lbs/day
May 2005	TSS, Monthly Loading	118.38 lbs/day	38 lbs/day
	TSS, Monthly Avg.	19.75 mg/l	15 mg/l
September 2005	TSS, Monthly Avg.	18 mg/l	15 mg/l
March 2006	TSS, Monthly Loading	85.82 lbs/day	38 lbs/day
	TSS, Monthly Avg.	20.20 mg/l	15 mg/l
	Ammonia-Nitrogen, Monthly Loading	47.12 lbs/day	13 lbs/day
	Ammonia-Nitrogen, Monthly Avg.	10.9 mg/l	5 mg/l
	Ammonia-Nitrogen, Weekly Avg.	12.9 mg/l	10 mg/l
April 2006	TSS, Monthly Avg.	20.31 mg/l	15 mg/l
	Ammonia-Nitrogen, Monthly Avg.	10.97 mg/l	5 mg/l
	Ammonia-Nitrogen, Weekly Avg.	12.9 mg/l	10 mg/l
June 2006	Ammonia-Nitrogen, Monthly Loading	14.16 lbs/day	13 lbs/day
	Ammonia-Nitrogen, Monthly Avg.	13.16 mg/l	5 mg/l
	Ammonia-Nitrogen, Weekly Avg.	16.5 mg/l	10 mg/l

XII. ADDITIONAL INFORMATION:

The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional water quality studies and/or TMDL's. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as requested by the permittee and/or as necessary to achieve compliance with water quality standards. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 0.30 MGD.

Effluent loadings are calculated using the following example:

$$\text{BOD: } 8.34 \text{ lb/gal} \times 0.30 \text{ MGD} \times 10 \text{ mg/l} = 25 \text{ lb/day}$$

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At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for facilities of flows between 0.10 and 0.50 MGD.

<u>Effluent Characteristics</u>	<u>Monitoring Requirements</u>	
	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Continuous	Recorder
CBOD ₅	2/month	Grab
Total Suspended Solids	2/month	Grab
Ammonia-Nitrogen	2/month	Grab
Fecal Coliform Bacteria	2/month	Grab
pH	2/month	Grab

Pretreatment Requirements

Based upon consultation with LDEQ pretreatment personnel, general pretreatment language will be used due to the lack of either an approved or required pretreatment program.

Pollution Prevention Requirements

The permittee shall institute or continue programs directed towards pollution prevention. The permittee shall institute or continue programs to improve the operating efficiency and extend the useful life of the facility. The permittee will complete an annual Environmental Audit Report **each year** for the life of this permit according to the schedule below. The permittee will accomplish this requirement by completing an Environmental Audit Form which has been attached to the permit. All other requirements of the Municipal Wastewater Pollution Prevention Program are contained in Part II of the permit.

The audit evaluation period is as follows:

Audit Period Begins	Audit Period Ends	Audit Report Completion Date
Effective Date of Permit	12 Months from Audit Period Beginning Date	3 Months from Audit Period Ending Date

XIII TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Statement of Basis.

XIV REFERENCES:

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2004.

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Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Town of Oak Grove, Oak Grove Wastewater Treatment Plant, February 16, 2007.